

**VARIABLE RATE CHANNEL QUALITY FEEDBACK IN A  
WIRELESS COMMUNICATION SYSTEM**

**Abstract of the Disclosure**

5       A channel quality feedback method for wireless transmission is described in which the rate for reporting channel quality information from a mobile station to a base station is variable as a function of the presence or absence of a transmission from the base station to the mobile station. In particular, the feedback rate from the mobile station to the base station is increased when the mobile station detects a  
10      transmission from the base station. As such, the feedback rate is slower when there is no data transmission for the mobile station and faster when the mobile station is receiving data.